

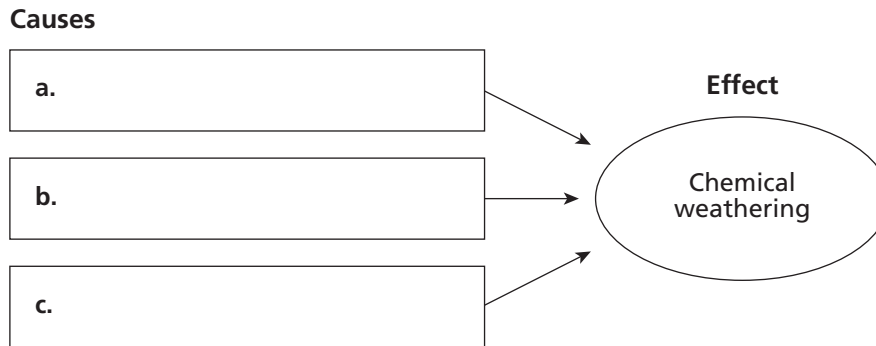
Weathering and Soil Formation ▪ *Guided Reading and Study*

Rocks and Weathering

This section describes how rocks are broken down by forces of weathering. The section also describes factors that determine how quickly weathering occurs.

Use Target Reading Skills

As you read, identify the causes of chemical weathering. Write them in the graphic organizer below.

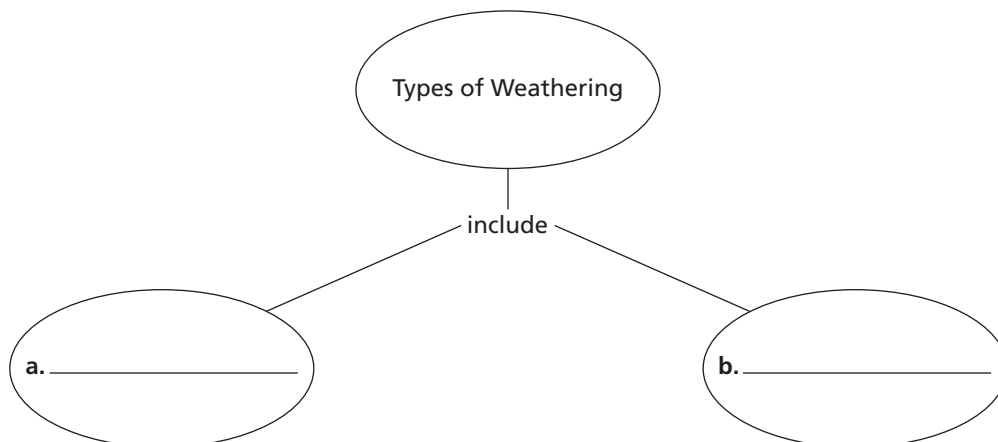


Weathering and Erosion

Match the process with its description.

Process	Description
___ 1. weathering	a. Movement of rock particles by wind, water, ice, or gravity
___ 2. erosion	b. Breaking down of rock and other substances at Earth's surface

3. Complete the concept map.



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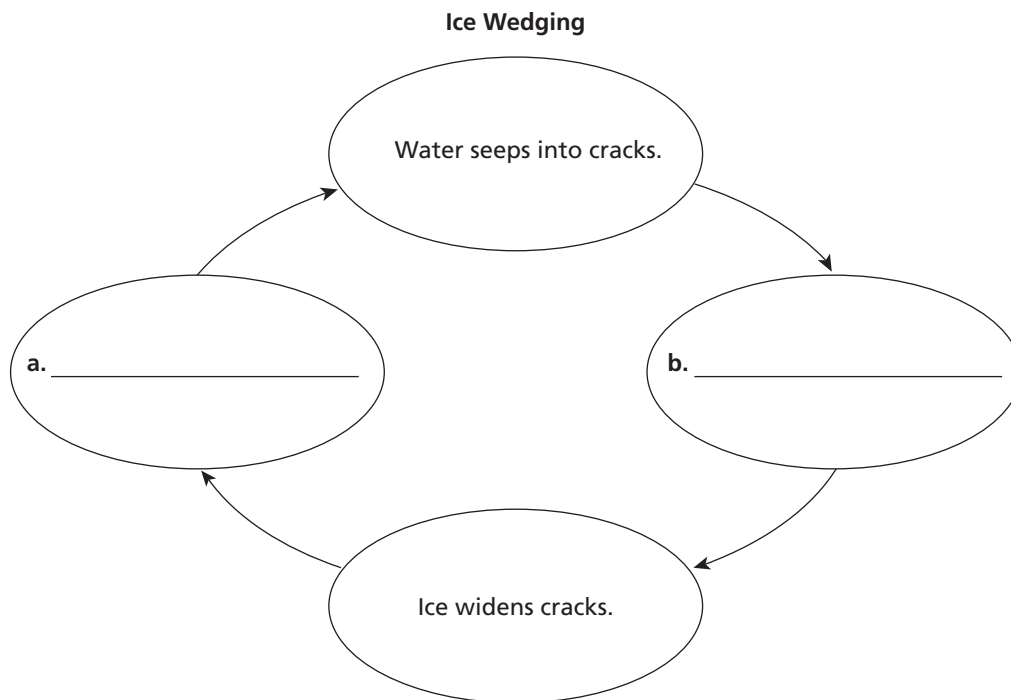
Rocks and Weathering *(continued)*

Mechanical Weathering

4. The type of weathering in which rock is physically broken into smaller pieces is called _____ weathering.
5. List the forces of mechanical weathering.
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____

6. What is abrasion?

7. Complete the cycle diagram.



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8. Would the process in the cycle diagram in #7 work in areas near Earth's equator? Explain.

Chemical Weathering

9. The process that breaks down rock through chemical changes is _____ weathering.
10. List the agents of chemical weathering.
- a. _____ b. _____
- c. _____ d. _____
- e. _____
11. Is the following sentence true or false? Chemical weathering produces rock particles with the same mineral makeup as the rock they came from. _____

Match the cause of chemical weathering with the statement that is true about it.

Cause	Statement
_____ 12. water	a. It causes iron to rust.
_____ 13. oxygen	b. It is caused by pollution.
_____ 14. carbon dioxide	c. It is the most important cause.
_____ 15. living organisms	d. It forms carbonic acid.
_____ 16. acid rain	e. Lichens are one example.

17. Is the following sentence true or false? Water weathers rock by gradually dissolving it. _____
18. Oxygen weathers rock through a process called _____.
19. List two kinds of rock that are easily weathered by carbonic acid.
- a. _____ b. _____

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Rocks and Weathering *(continued)*

20. How do plants dissolve rock?

Rate of Weathering

21. The most important factors that determine the rate of weathering are type of rock and _____.

22. Is the following sentence true or false? The minerals that make up a rock determine how fast it weathers. _____

23. A rock that is full of tiny, connected air spaces is said to be _____.

24. Why does a permeable rock weather chemically at a fast rate?

25. Why does chemical weathering occur more quickly in a hot climate?
